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## REQUEST FOR ACCESS TO AN APPLICATION UNDER 37 CFR 1.14(e)

In re Application of <i>Baecus</i>	
Application Number <i>07/439093</i>	Filed <i>11/17/89</i>
Art Unit	Examiner

Paper No. 19Assistant Commissioner for Patents  
Washington, DC 20231

1.  I hereby request access under 37 CFR 1.14(e)(2) to the application file record of the above-identified ABANDONED Application, which is not within the file jacket of a pending Continued Prosecution Application (CPA) (37 CFR 1.53(d)) and is: (CHECK ONE)

 (A) referred to in:

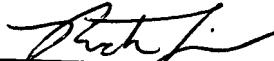
United States Patent Application Publication No. \_\_\_\_\_, page \_\_\_\_\_, line \_\_\_\_\_,

United States Patent Number 6451567, column \_\_\_\_\_, line \_\_\_\_\_, or

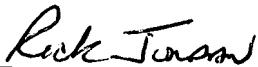
an International Application which was filed on or after November 29, 2000 and which designates the United States, WIPO Pub. No. \_\_\_\_\_, page \_\_\_\_\_, line \_\_\_\_\_.

 (B) referred to in an application that is open to public inspection as set forth in 37 CFR 1.11(b) or 1.14(e)(2)(i), i.e., Application No. \_\_\_\_\_, paper No. \_\_\_\_\_, page \_\_\_\_\_, line \_\_\_\_\_.

2.  I hereby request access under 37 CFR 1.14(e)(1) to an application in which the applicant has filed an authorization to lay open the complete application to the public.



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US006451567B1

(12) **United States Patent**  
**Barclay**

(10) **Patent No.:** **US 6,451,567 B1**  
(b5) **Date of Patent:** **Sep. 17, 2002**

(54) **FERMENTATION PROCESS FOR  
PRODUCING LONG CHAIN OMEGA-3  
FATTY ACIDS WITH EURYHALINE  
MICROORGANISMS**

(75) Inventor: **William R. Barclay, Boulder, CO (US)**

(73) Assignee: **Omegatech, Inc., Boulder, CO (US)**

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/461,709**

(22) Filed: **Dec. 14, 1999**

**Related U.S. Application Data**

(63) Continuation of application No. 08/968,628, filed on Nov. 12, 1997, now abandoned, which is a continuation of application No. 08/461,137, filed on Jun. 5, 1995, now Pat. No. 5,688,500, which is a continuation of application No. 08/292,490, filed on Aug. 18, 1994, now Pat. No. 5,518,918, which is a continuation of application No. 07/962,522, filed on Oct. 16, 1992, now Pat. No. 5,340,742, which is a continuation-in-part of application No. 07/911,760, filed on Jul. 10, 1992, now Pat. No. 5,340,594, which is a continuation of application No. 07/580,778, filed on Sep. 11, 1990, now Pat. No. 5,130,242, which is a continuation-in-part of application No. 07/439,093, filed on Nov. 17, 1989, now abandoned, which is a continuation-in-part of application No. 07/241,410, filed on Sep. 7, 1988, now abandoned.

(51) Int. Cl. <sup>7</sup> ..... **C12N 1/00; C12N 1/12;**  
**C12P 1/02; C12P 39/00; C12P 7/64**

(52) U.S. Cl. ..... **435/134; 435/42; 435/135;**  
**435/171; 435/243; 435/257.1; 435/946**

(58) Field of Search ..... **435/243, 257.1,**  
**435/946, 134, 42, 171, 135**

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(57) **ABSTRACT**

A process is provided for growing the microflora *Thraustochytrium*, *Schizochytrium*, and mixtures thereof, which includes the growing of the microflora in fermentation medium containing non-chloride containing sodium salts, in particular sodium sulfate. In a preferred embodiment of the present invention, the process produces microflora having a cell aggregate size useful for the production of food products for use in aquaculture. Further disclosed is a food product which includes *Thraustochytrium*, *Schizochytrium*, and mixtures thereof, and a component selected from flaxseed, rapeseed, soybean and avocado meal. Such a food product includes a balance of long chain and short chain omega-3 highly unsaturated fatty acids. Further, a process for producing lipids includes a fermentation by growing euryhaline microorganisms which are capable of producing 1.08 grams per liter of the fermentation medium per day of long chain omega-3 fatty acids per 40 grams of sugar per liter of the fermentation medium at a sodium ion concentration of 60% seawater. The lipids are then extracted from the euryhaline microorganisms.